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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,709	06/15/2001	Dennis J. O'rear	005950-716	9362

7590

05/20/2004

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EXAMINER
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MCAVOY, ELLEN M

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/882,709	<b>Applicant(s)</b> O'REAR, DENNIS J.	
	<b>Examiner</b> Ellen M McAvoy	<b>Art Unit</b> 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12 Feb. 2004 and 11 Aug 2003
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

In further review of this application, PROSECUTION IS HEREBY REOPENED. A non-final office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlowitz et al (6,663,767) alone, or in view of Hanlon et al (EPA 427,456).

Berlowitz et al ["Berlowitz"] disclose fuel blends of Fischer-Tropsch derived fuels and conventional petroleum fuels useful in diesel engines which are low in sulfur and which demonstrate better than predicted emissions characteristics. Berlowitz teaches that the blended

fuel has a sulfur content less than 500 ppm, and preferably less than 30 ppm. See column 2, lines 15-38. Berlowitz teaches that the Fischer-Tropsch products may be hydrotreated which includes one or more of hydrotreating, hydroisomerization, dewaxing and hydrocracking. See column 4, lines 35-48. The conventional petroleum derived fuel may be any conventional low sulfur diesel fuel and is characterized as an undercut diesel fuel, that is, a fuel that has a final cut below the boiling range of a typical diesel fuel. Berlowitz teaches that sulfur levels of the final blend may be controlled based on the final cut point of the conventional diesel blend stock. See column 4, line 60 to column 5, line 7. Although sulfur contents of less than 10 ppm and less than 1 ppm are not specifically cited in Berlowitz, the examiner is of the position that such low amounts of sulfur in the hydrocarbon blend is clearly within the scope of the prior art. The peroxide number cited in the claims measures the build up of peroxides in the blended composition which indicates the onset of oxidation and provides a measure of oxidative stability. Although Berlowitz does not discuss this value, Berlowitz teaches that some oxygenates may be produced in the Fischer-Tropsch process. Berlowitz teaches that such oxygen concentration is relatively low, and essentially nil after hydrotreatment. See column 5, line 60 to column 6, line 2. Hanlon et al ["Hanlon"] is added to show that phenolic antioxidants are well-known in the art of fuel and lubricant compositions. The examiner is of the position that it would be obvious to add known antioxidants to the compositions of Berlowitz if their known imparted properties were so desired. Thus, the examiner is of the position that Berlowitz alone, or in combination with Hanlon, meets the limitations of the claims.

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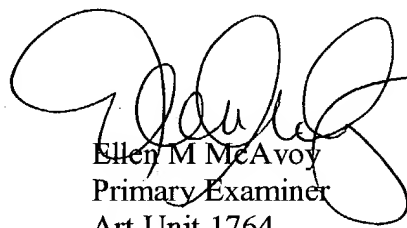
The prior art rejections over Berlowitz et al (6,080,301) and (6,165,949) and Wittenbrink et al (6,332,974) are withdrawn because a specific amount of sulfur in the blended compositions is not set forth.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (571) 272-1451.

The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M McAvoy  
Primary Examiner  
Art Unit 1764

EMcAvoy  
May 13, 2004